

ABSTRACT
A BALANCING ACT: LANDFILL GAS DEVELOPMENT VS. REGULATORY COMPLIANCE

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Landfill owner/operators with existing or pending LFG development projects must consider the concerns of both fuel recovery and environmental/regulatory control when designing, operating, and maintaining their LFG systems. The purpose of this presentation is to highlight and discuss these concerns and to provide insight on addressing the challenges posed by the concerns.

The challenges include:

- Maintaining a project philosophy consistent with both fuel recovery and environmental control.
- Understanding the design elements required to provide fuel recovery as well as environmental control.
- Achieving and maintaining fuel quality without sacrificing emissions or migration control, i.e., regulatory compliance.
- Staffing the project with personnel sufficiently trained to understand the dual roles of recovery and control.

The challenges are best addressed at every point along the project continuum, from design, through construction, and then via ongoing operation and maintenance. For example, designs need to address variable gas compositions that may be encountered while extracting gas from different areas of the landfill. Construction should adjust for differing conditions encountered in the field. Operation and maintenance requires parameters pertinent to collecting gas for fuel and for achieving environmental compliance.

Without consideration to both views, it will likely be difficult to meet the economic and regulatory goals of a successful LFG development project.